

DOCUMENT RESUME

ED 239 592

IR 010 954

TITLE Audio Teleconferencing. SAT Users Conference.
INSTITUTION Australian Telecommunications Commission,
Melbourne.
PUB DATE 14 Mar 83
NOTE 31p.; Document printed on colored paper.
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Design Requirements; Electronic Equipment; Feedback;
Foreign Countries; Group Activities; *Interaction;
Online Systems; *Organization; *Program Development;
*Program Implementation; Teaching Methods;
*Teleconferencing; Visual Aids

IDENTIFIERS Australia

ABSTRACT

This guide offers advice on using and running teleconferences, beginning with background information on what teleconferencing can and cannot do; situations, systems, and applications; and how and why to use visuals. Ideas on how to run a teleconference are then presented. The preparation of a teleconference is discussed in terms of organizers and their responsibilities, familiarization, people to talk to, constructing a group, format and content, presentation, interaction, feedback, and coping with silence. Considerations in running the conferences that are addressed include the last-minute check, setting up the teleconference, during the teleconference, finishing off, ad hoc participants, and follow-up. A summary reviews both preparation and the session itself. Suggested procedures for working with small groups using the Telecon Conference Facility available in Australia and for forming a 'Telelink' group are attached. (LMM)

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Audio Teleconferencing

SAT Users Conference

14 March 1983

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AN INVITATION

As part of the process of evolving a User Manual which fulfils your needs (and those of the increasing numbers of Australians who are learning to make use of teleconferencing in their work, education and personal lives), this Interim Guide is now offered to interested parties for field-testing and review. Comments, criticisms and suggested additions arising from your own experiences with teleconferencing are therefore most welcome, and may be directed to:

Lesley A. Albertson
Senior Psychologist
Telecom Australia Research Laboratories
770 Blackburn Road
Clayton Victoria 3168

Telephone: (03) 541 6727.



E. Sandbach
Director, Research

ACKNOWLEDGEMENTS

Thanks are due to Elizabeth Barnett, an Arts undergraduate from Melbourne University, whose diligent work as a Vacation Student with the Telecom Australia Research Laboratories during the summer of 1982/83 laid the foundations for this Interim Guide. In the course of carrying out her assignment, Elizabeth conducted personal interviews with people experienced in various aspects of teleconferencing, and to these people the Laboratories are indebted. They include Gwenda Birch (Telecom Australia), John Collins (Council of Adult Education), Shirley Fleming (Telecom Australia), Jennifer Gibbons (Association for the Blind), and Terry O'Driscoll (Telecom Australia).

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TELECONFERENCING: AN INTERIM GUIDE

1. BACKGROUND: WHAT IT'S ALL ABOUT

Teleconferencing - 'group communications' - is simply communication between more than two people, in two or more places, over a telecommunications link. (Videoconferencing, a variation, uses the line to transmit 'live' images of the participants.)

It's very diverse: it can range from interstate (or even international) meetings involving many people and locations, using a host of 'enhanced' facilities, to a simple telephone call which happens to contain six or seven people rather than two.

The areas in which it can be employed are also numerous. For example, it has been used to...

- ENRICH the educational environment of students in isolated schools, by bringing a whole class 'on line' with a specialist teacher, or allowing them to interview such people as prominent politicians
- TROUBLESHOOT - through linking a technician in the field with a group of peers who can offer advice from pooled knowledge, or access to resources such as libraries or specialised equipment
- COMMUNICATE between professionals: to update skills, to consult group-to-group with specialists on a problem, or simply to maintain a sense of professional 'identity' for those isolated from their peers
- STIMULATE housebound people by providing regular contact - and thus therapy and incidental check on condition - with a welfare officer, and others, in the security of a familiar environment, without requiring any resource-wasting travel
- CO-ORDINATE business strategies, or streamline administration, through linking management personnel from widely scattered branches into a central- office discussion

In short, teleconferencing offers a new means of communication. It can provide access to information; it allows people to interact as a group or team, rather than simply pairwise; and it can conserve resources - including time.

1.1 Cans and Can'ts

There are a few points about teleconferencing which should be noted. It certainly has many advantages - but it doesn't work miracles, and if you don't think about these things your teleconference may not achieve what you want it to achieve.

On the positive side: Teleconferencing is excellent for discussion, tutoring, updating and like uses - anything that's aimed at disseminating information.

People may participate more fully in a teleconference than in a face-to-face meeting. Second, it can also be reassuring to join in a meeting from one's own environment, whether class, office or home. There, too, one can

have resources at hand. And sometimes it's easier to understand an idea presented without visual distractions (think of the differences between TV and serious radio programs).

However, unless you're using video equipment as well, between locations there will be none of the visual cues we normally employ in communicating. Everyone will have to rely on ears, not eyes, to tell them what's happening - and why.

This will influence almost everything that you do. If, for instance, a teacher giving a lecture to a rural high school class can't see the audience reaction, s/he might (wrongly) decide that there isn't any. Because of this, the teacher may stumble on in confusion, or decide to speed up presentation. It'd be much happier for all concerned if somebody thought to say something to indicate the status quo - even a 'huh?' or 'um-hmm' would do. Or the teacher could simply ask for feedback.



Photograph 1: Teleconferencing in a Rural High School

Other considerations arise if it's all talking. Attention wanders very easily, because the mind processes and understands speech faster than it's uttered. The brain isn't as active as it might be, so it gets bored and may develop a feeling of fatigue for no apparent reason. It needs a visual focus or a 'change of pace' to stay on the job.

Finally, a teleconference system isn't a magic wand. It won't provide a marvellously therapeutic support group if the social worker just holds the phone and says: 'Well, here we are!' It won't help students at all if neither they, nor the teachers or resource people, have bothered to prepare for the session. And it won't do an administrator any good if s/he expects a telephone line to provide a previously nonexistent empathy with staff, simply because it's hooked up to a lot of expensive equipment. Teleconferencing must be prepared for; part of that preparation is being ready to make an effort.

Steps to help overcome these problems will be given later on in this guide, so if you already know about the types of teleconference that can be arranged, and the equipment that can be used, turn to the section 'The teleconference - Some ideas on how to run it'. Otherwise, read on...

1.2 Situations, Systems and Applications

A teleconference can be constituted in many ways. Some examples:

- Multi-point - single participants, or groups of participants (or a combination of individuals and groups) at three or more locations are linked into a single teleconference
- Group-to-group - a group of people, all at one location, link up with a group at one other location
- Group and resource - a group linked up in a teleconference with a resource person, or data bank, or other external information base.

There are, of course, many variations on these basic configurations.

Teleconference SITUATIONS are as follows:

- regular or scheduled sessions. These are part of an ongoing program and have some consistency of membership or purpose.
- one-off. As the name implies, these teleconferences are not part of an ongoing series. Participants may or may not be familiar with teleconferencing. Lead time varies, but preparation is imperative.
- ad hoc sessions. These include meetings called at short notice by a group which does not plan to meet again; meetings to solve a particular problem; meetings to introduce someone who will later participate in a scheduled series of teleconferences.

Teleconferencing SYSTEMS fall into the following categories:

- permanent studio. This may involve a 'dedicated line' as well as a large variety of equipment, such as that used for video and/or graphics transmission.
- portable equipment (for example, the Small Group Terminal or a loudspeaker phone) linked into a normal telephone line
- no permanent equipment. The teleconference is established by telephoning a manual operator or dialling direct into a conference 'bridge' located in a telephone exchange or elsewhere in the network.

Broadly, the APPLICATIONS of teleconferencing are:

- information dissemination and collection
- organisation - co-ordination, strategy development, consultation
- welfare - counselling, therapy, supervision.

Each category involves some aspects of the others, and this list is by no means intended to be exclusive or restrictive.

1.3 Visuals - How And Why

Visual material is extremely important in teleconferencing. It can provide:

- a 'second channel' of information input. Remember, the brain processes speech at a much higher rate than it hears it. Attention can wander and some of the material could be lost to the listener. If there is a second way in which the information is transmitted - here we're talking about providing copies of notes for classes, or statements of objectives for professionals' meetings, for instance - then double attention can be paid to it. It's like a change in scenery: when something different comes along, you'll take notice of it.
- a focus for the topic under discussion, or just something to prevent attention from wandering
- if it's printed, a record of the session for future reference
- a means of graphically illustrating points that are difficult to explain by spoken word alone.

Whether provided as printed material or video images, visual data seems to increase the benefit that can be obtained from a teleconference. It isn't strictly necessary - people are quite capable of adapting to sympathetic audio-only communication - but, obviously, it's a good idea.

A few techniques can be used during the conference to help participants feel that a real meeting is taking place. These mostly rely on the creation of a mental 'picture' of the teleconference, and will be dealt with later in the guide. This section is concerned with the creation of REAL visuals.

Printed material can be distributed in two ways:

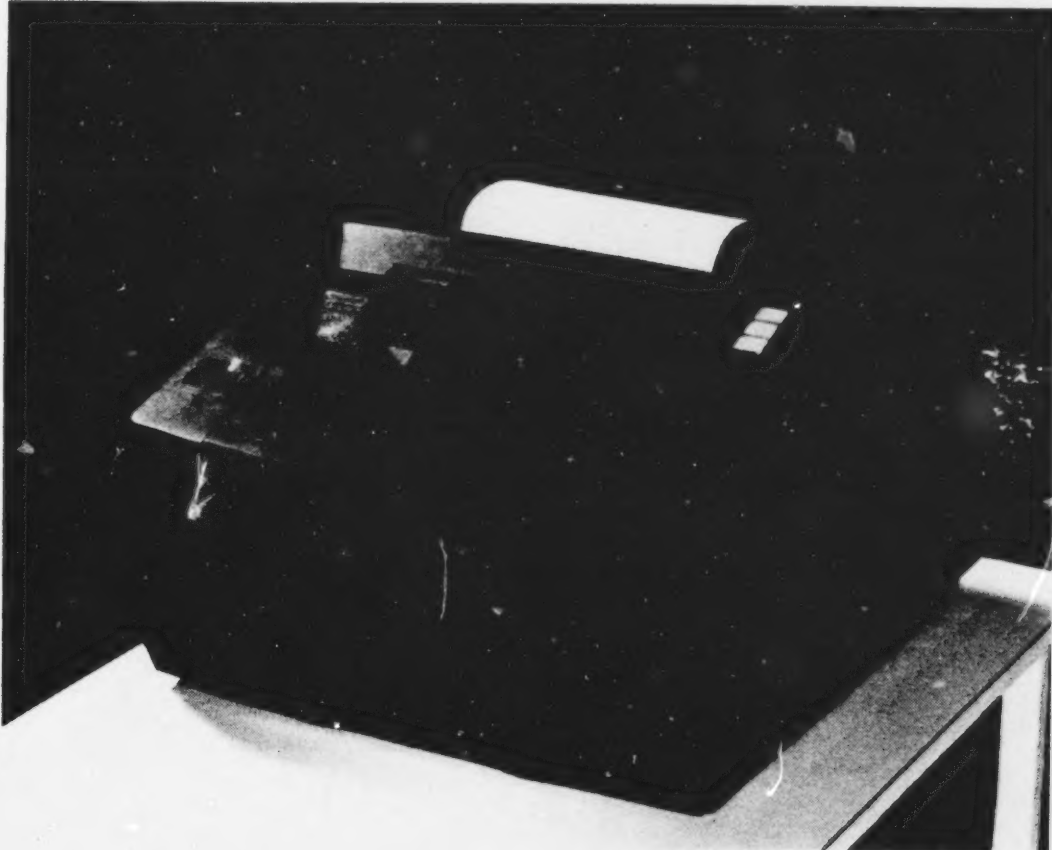
(i) Through the Mails

Teleconference leaders - co-ordinator, teacher, whoever - can prepare notes or diagrams in advance for their site or, if several groups are participating, for the whole teleconference. This material is sent before the session to each location, together with instructions about how to present it. The idea is that everyone will get the same data at the same time: 'synchronised presentation'.

(ii) Through Telecommunications

One alternative is to use a facsimile machine (FAX). These machines use telephone lines to reproduce printed matter from one location to another. It's a little like photocopying by telephone. However, it is

not generally possible to transmit FAX copies to multiple sites simultaneously, and unless you've got two lines, one for speech and one for the FAX, you won't be able to talk to other sites while the FAX is transmitting. (This can be disruptive. Although the enforced period could be used by participants for discussion within their group, there's usually not enough time to achieve anything with this - only to help lose track of the teleconference! FAX transmission with a single line is best done either before or after the conference.)



Photograph 2: A Commercially-Available FAX Machine

Other facilities can transmit graphics as they are written. For example, tracing over a sensitised surface with a 'light pen' (modified antenna) reproduces the traced pattern at another location via a telephone linkup. However, this type of equipment is not readily available in Australia, and so it won't be included here.

'Live' images can be given by a full-scale videoconference. This usually requires a studio setup, but in any case allows the transmission of a TV image of one site (i.e. the participants) to others. All actions, and reactions, performed in camera range can be seen. Often included are special facilities to transmit images of printed material. This does not provide 'hard copy' for other sites, but the information can be seen. (Holding diagrams up to the camera does much the same thing.)

Slow-scan TV (SSTV) is similar. It sends live pictures from one location to others. However, they're 'frozen'. Instead of continuous transmission, giving action, SSTV systems send one picture at a time. What happens between each transmission isn't displayed. The teleconference participants will see fixed images for a certain time before the next picture gradually replaces it. This is because the camera slowly 'scans' the image, and doesn't transmit a picture until it has viewed the image from top to bottom. (It then starts again.) The time between transmission depends on the make.

Slow-scan can be very good (young school-children in particular enjoy watching the pictures 'melt' into each other). If you don't like the delay or the slightly odd effect of picture change, it can be somewhat annoying.

Printed notes aren't all that can be given synchronised presentation. Slides, overheads and group off-air activities can also be organised in this way. On-site videotapes are particularly good. Some systems allow the site to access computer data banks, which may also provide visual input.

Keep in mind:

- Except in videoconferencing, visual materials won't make up for the lack of visual information on what the other participants are doing.
- Whatever equipment is used, graphics should enhance the audio part of the conference. If not, it's better to leave them out as they'll compete with the speakers for attention.
- Any written materials should, if possible, be interesting in appearance as well as content. Be wary of the fine line between helping and distracting.

The next section gives some ideas on how to prepare for, and then run, a teleconference. As you read it, remember that this isn't a rulebook. With a little experience, you should be able to find out what works best for the people in your conferences, and the task you are trying to achieve.

As long as you think about what you're trying to do, and about what effects teleconferencing's audio emphasis could have on this, the strategies you evolve will be the ones most useful to you.

2. THE TELECONFERENCE - Some Ideas On How To Run It

2.1 PREPARATION

2.1.1 The Organiser and His/Her Responsibilities

If a teleconference, or teleconferencing program, is to be effective, somebody must accept responsibility for co-ordination and organisation throughout.

This will involve considerable time and effort on the part of the organiser. Depending upon the situation, s/he may not only plan, but arrange and conduct the session. There are two sets of duties: to organise the conference/s, and to run them. It is most efficient if one person performs both, as then there is less opportunity for confusion and

communication breakdown.

The organiser must arrange the teleconference members, format and materials, as well as take responsibility for such details as times and dates.

Some of these particulars may need to be worked out in consultation with other people, such as the participants or teleconference leaders. In a welfare group, it may be important that the members help to decide what the next session will involve, or who they'd like to have as guest speaker. A remote teacher will probably need to plan the lessons with the class's regular teacher.

The type of teleconference that you decide to have will depend upon your needs, so the first thing to do is determine why you want to hold a teleconference: what you expect to be able to do.

(A note of warning: It has become clear that unless the teleconference is wanted by the people who will be running it, or who are expected to relinquish some control if it is to occur, the experiment won't be a success. It is absolutely no good forcing teleconferencing upon people as 'an improvement'. They'll almost certainly resent it, and possibly be obstructive).

So the session/s must be planned, and arranged, so as to be sympathetic in structure and content to the purpose and the people. It isn't a good idea to attempt to allow for spontaneity, or informality, by leaving most of the conference indeterminate.

Everybody who organises teleconferences will have different priorities. Some people will need to find or select their participants after deciding what they want to present and obtaining the equipment that they want to use. Others will know their participants and the way in which they'll use teleconferencing, but will need to work out a format.

What you do to prepare will depend on the choices you have, for setup, participants, content, equipment and so on. But by the time the teleconference is to be held, you should have considered and arranged all of the variable factors. The more you understand about teleconferencing, and the better you are organised for one, the more likely it is to be worthwhile.

2.1.2 Familiarisation

As organiser, you must know what you will be using to teleconference and how to use it. Spend some time becoming familiar with any specialised equipment; practice on it, to find out the best way of using it. Try to remember your own first impressions (and difficulties) so that you can help the other participants when they encounter the equipment. Experiment. Learn how to overcome technical problems which might disrupt a session.

Make sure you know:

- what the equipment should do
- what it will do - that is, any tricks in its operation
- what it might do if not operated properly, or if a line or equipment fault arises
- what to do if this happens.

If possible, you should obtain the same sort of knowledge about the Telecom service you will be using. For instance, noisy or low-level lines can be a problem for some bridged conferences. If you are planning to hold this sort of meeting, you will need to find out whether or not your exchange is subject to this fault, and what strategies can be adopted to overcome it (for example, participants may be instructed to replace their receivers and wait to be reconnected).

The best way to do this is to hold, or else sit in on, another - teleconference. If you haven't teleconferenced before, it won't matter so much what the practice involves - the important thing is to experience this type of communication.

If it's at all possible, however, the practice should be similar, in facilities or style, to those sessions you'll be running. As the purpose is to increase your knowledge and confidence, the practice run should be unimportant - concentrate on the experience, not its significance. (Try teleconferencing with friends or colleagues for a brief discussion, for instance.) If you can't get any practice with the equipment or the system, you could attempt to obtain advice from previous users. Failing that, simply try a few exercises to build an awareness of what is involved in teleconferencing.

Try to imagine, and understand, what will happen to the way in which you communicate. Remember, you won't be able to simply see what people think of something you've said. You'll have to tell them about what your reaction to their comment is if you want them to know. And it won't be just like an ordinary one-to-one telephone call. There will be several people out there; think about how you can communicate with all of them - and what it will be like.

Do some practical exercises. Try talking with somebody when you are both blindfolded. Better, try communicating in a group who are all blindfolded. It may help to talk about the experience, as a way of coming to terms with it, or it may be better to discuss something else - this will depend on how secure you feel.

Anything that involves communicating while using only your voice and your ears will probably help. (Try relaying a telephone conversation to someone else in the room, and from them to the other end of the phone). Once you have some idea of what it's like, you can imagine what the other participants will experience. It's then easier for you to make allowance for this when you're planning what to do - and how to do it. You'll have to adapt to the means of communicating - it won't adapt to you.

Familiarisation also involves the participants. They will need to have some information about a teleconference leader who is unfamiliar to them. This extends to people who are participating in a single session. 'Introduce' a remote teacher to a class before the lessons begin. Provide information about a consultant to the engineering personnel s/he is to help. If the group is small, or close, ensure that information about them is available to the 'one-off' participant or stranger. It helps people if they know who they'll be talking to.

The participants will also need to know how to operate the equipment. Pass on to them anything you have gained during your own familiarisation which

they, as participants, could also use. Similarly, let them know about any delays in the connection process, or hitches which could interrupt the session - otherwise they could very well 'hang up' in the belief that the teleconference has failed.

In summary:

- know the equipment and the service
- know what to do if a problem with either arises
- spend some time becoming accustomed to the sort of communication which will be used - in theory, if nothing else!
- practise if you get the chance
- do what you can to let the other participants know about using the equipment and the service, about teleconferencing technique and about the people who will be involved.

2.1.3 People To Talk To

If anyone else will be taking over the running of a session, or working with you to hold a teleconference, plan it with them. Between you, establish:

- who'll present what
- what information will be presented, and in what manner
- how you'll organise interaction between participants and presenters.

Sometimes it will also be necessary to determine the boundaries of authority who will issue instructions to which employee; which teacher will discipline which child.

Later in this guide, after the section on 'Running the Teleconference', is some information on ad-hoc participation. This might also help you with planning sessions which regularly involve someone else.

As mentioned earlier, sometimes it's the participants who ought to be included in the formulation process. People can then participate in the exercise, rather than being passive recipients of it. Consult with them on session topics; rework the structure with them to suit everyone's needs.

The participants in the teleconference should know what the goals of the conference are, and what steps are required to achieve them.

There are other people, who may not be participants, but who are nonetheless concerned with what's being done, and they should be consulted also. Make sure that the people who asked for the teleconference, whether or not they'll be taking part, have a realistic idea of what can be achieved. Also ensure that anyone who'll be relinquishing control of the group for the teleconference is happy with the way this will be done, and understands what will be happening. Try to get some interaction between the 'on-air' and 'off-air' leaders so that the sessions can be integrated and not irrelevant.

An actual example comes from education. A supplementary maths class held for primary school children in an outback school lost almost all of its value, because the two teachers didn't communicate adequately. The remote teacher hadn't been given any information about what was being done in the regular lessons; the class teacher wasn't aware of what the supplementary sessions covered. The result was that the children were being given, once

or twice a week, something which was totally divorced from what they did in their ordinary classes - there was no relevance and no follow-up.

2.1.4 Constructing A Group

Your group may have already been determined, in which case you can go on to think about the structure or the content of the sessions.

But some people will be constructing a group for the teleconference. It may be that you'll do this by selecting from a pool, or dividing it into sections with which to teleconference. Or maybe you won't have much choice in deciding who takes part: you'll have to accept whoever applies, or is instructed to participate.

In the latter instance, you'll just have to get some information about your participants and their needs. Any background you can get will be useful. There are some things about the participants that it would be particularly useful to have knowledge of - these are noted after the section on selecting participants.

If you do have the chance to construct your own group, make sure that you consider the physical, mental and emotional abilities and limitations of the potential members. Any knowledge that you have about personalities and communication habits could help. It isn't a question of excluding some people from the opportunity to teleconference. Rather, the idea is to establish a viable mix; this may mean not placing particular people, or types of people, in the same teleconferencing group.

Some things might be obvious to you: try not to include a lot of people who will attempt to assume control of the other participants, for example.

Nor should you build a large group of very shy or quiet individuals. Although the anonymity provided by teleconferencing can help such a person to come out of their shell, there still needs to be somebody - preferably several somebodies - besides yourself who is prepared to start talking. Very small groups of three or four timid people have been successful, but they must be very non-threatening. Such conferences, usually for therapy, need to be skillfully led and this involves a great deal of effort from the leader.

The best sort of teleconference has a moderate mix of people, perhaps with different needs to interact - who can all be prompted to contribute to the meeting. This doesn't mean that they must all try to talk incessantly. It is not at all bad for the group to have a few slightly reserved members, as long as the 'talkers' can be persuaded to let them have a say when they want to!

Information about your participants that will be useful:

- Personality
- Communication habits - and problems (including, sometimes, 'phone manner')
- abilities with regard to the topic
- expectations about teleconferencing.

The best size for a teleconference group seems to be about seven or eight people. Sometimes smaller groups can be awkward: nobody can be persuaded to say anything and it ends up seeming a waste of time - so much effort for so

few. Very large groups can become impersonal. Just as in large classes the teacher may not be able to pay attention to everyone, so it may turn out that the same few people are doing the interacting. For those who can't edge in, it soon becomes boring and frustrating, and they will get very little out of it.

Essentially, the problem concerns the amount of attention that participants can get from the other group members, including the leader. In some instances this will be a factor in maintaining control of the discussion.

Obviously, not every group will be able to keep within the size limits suggested. A great deal depends upon the purpose for which the teleconference is being run, the leader and how well the participants know each other. Problems with interaction and topic can be overcome. Try to build a sympathetic atmosphere in the conference; make sure that the direction it takes, even if not entirely what you'd expected, is at least worthwhile.

Ideally, everyone in the conference would know each other well - enough to recognise voices. This helps to make everyone feel comfortable and lessens the burden on the teleconference leader to 'look after' them.

(For example, for technicians to have worked together, or a class to have met its remote teacher, or even for businessmen to have lunched together would help them to feel that they 'know' each other and can talk together.)

But as this rarely happens, you'll have to compromise. Make sure everyone has a little background about the speaker, or knows the names of other people in the call. If they have met face-to-face before, let them know so that they can feel there's at least something reassuringly familiar.

If the teleconference is to be part of a series run by one person, that person should try to contact each person individually beforehand.

2.1.5 Format and Content: Deciding what you want to do

Format is the way in which interaction is designed to occur; for example, speaking and topic orders.

Some sessions, while having an established agenda, may work best if there is a free flow of information among the participants for at least part of the session.

For example, in a business teleconference in which a new project is being planned, useful reactions might be lost if there is too much emphasis on Correct Procedures, and ideas forgotten while awaiting one's turn to speak.

On the other hand, a large group of professionals linked into a seminar devoted to recent advances might require a more formal organization if information is to be effectively disseminated. In such cases, it may be useful to hold question-and-answer sessions at set points in the program.

For most teleconferencing groups, a certain amount of trial-and-error will be required to find the format best suited to the people and the purpose for which the conference was established. Don't be afraid of evolution.

However, it's best to start out with something fairly definite in mind about how you want things to be done, even if you and the group change this later on as you gain experience. In deciding on format, it's important to keep in mind the participants you'll have and what you want them to get out of it.

In determining the sort of format you want to start with, you should consider:

- the presentation - the way in which you want information delivered, or the group to be directed
- the interaction - how group members are to communicate with each other, or otherwise provide input
- the feedback - how anybody presenting material can be given information about its effect on the audience.

2.1.6 Presentation

In any teleconference, there probably needs to be someone who takes charge of looking after the participants. S/he must strike a balance between encouraging them to take an active role in the session, and 'protecting' them if they're not up to doing so - or from other participants.

Welfare groups in particular need to bear this in mind. In any case, if it is appropriate for the group to have a leader, modify the presentation and interaction as necessary to help the members.

In deciding how you want to present material in the teleconference, think about your aims.

Is it to be a 'dissemination of information' session, the idea being to give people instruction, or to update their knowledge about something? If so, a lecture format may be best: one presenter (or a very few) delivering the material in a straight talk. This is the best way of getting across a lot of information. Remember that - especially in a teleconferencing situation - there's a limit to what people can absorb. Don't tell them too much (about three major points per half hour works well).

It may be that a discussion group is what you want. You'll have to consider how you're going to arrange the interaction you're trying to obtain, and whether or not you want to do anything else as well.

For educational applications, many of the techniques used in adult education can be modified to suit. You might be able to use on-air book readings, or set assignments to be discussed at the next session. Children, especially, need to be kept involved. Have some materials at their location which you can guide them in using, or get another adult to demonstrate.

Basically, decide what you want to do and how you could present it. Then consider it in the light of what you know about teleconferencing. Will the presentation need to be adapted? Is there anything you won't be able to do after all? What will your participants be comfortable with?

Think about when you want what to be done. What order will things be in? If visuals are to be used, when? How? At what point do you want discussion, and when should everyone just listen?

If you are going to use visual materials, or graphic data, of any description, you MUST be careful with their presentation. If you expect something to be ready at a location, make sure that the appropriate people know what they have to do. (Don't rely on the fact that you told the kids that next week their teacher would have some text books for them. Does the teacher know that next week s/he'll need to have text books? And which ones? And what to do with them?)

If things need to be sent in advance, allow plenty of time. Send explicit instructions. If there's anything the participants will need to have with them, please make sure they know it. Don't plan the teleconference around something and forget to make it available.

Any session in which you want to present a lot of material, whether by lecture or not, should be broken up. If there's a lengthy period of straight talking, attention will flag. A cure for this is to vary the presentation. This can 'wake up' participants by giving their brains a new type of data to process.

The person presenting the material can do this, to a certain extent, while talking. Changes in voice, and speed, and material can all help. So can pauses, and emphases on significant words.

It's better still to change what's being done in the teleconference. Try giving a real change of pace; let the group do some talking for a bit, or ask questions. Do something using visual materials, or an on-air exercise. Take time as a group to make decisions based on what's been presented.

Some examples to start you thinking:

- Through (sometimes bitter) experience, 'teletutorial' groups at an English university devised this format: the session began with a brief talk by the tutor, and went to a question and answer segment before winding up with a bit of discussion, or planning what to talk about next time.
- A business group in Melbourne regularly runs discussion sessions with its executive staff. These are very unstructured: the participants enter the conference call, greet each other and indulge in some brief conversation before getting down to business. Most of the group members have met face-to-face, and have few problems identifying each others' voices, so almost no protocols are used to govern interaction.
- An excellent welfare program has been set up by a Melbourne welfare worker, who for a typical session will begin with greetings and 'care' conversation, before using literature readings - poetry, novels, even newspaper cuttings - to spark off a train of discussion and carefully-led imagination exercises. This finishes before her housebound, elderly and blind participants are tired, or confused, and the session is allowed to come to a gentle, natural end.

2.1.7 Interaction

The amount of interaction that develops will depend upon the use to which the sessions are put, and the extent to which the participants become comfortable with the system and each other. Bearing in mind that your group will probably evolve their own procedures for interacting, think about some

ways in which it could be done.

Decide how formally organized the group's interactions should be. A few of the ways in which you can arrange participation are given here, but if you can think of any which would better suit your purpose, and which are compatible with the characteristics of teleconferencing, use them. Take into account the fact that the teleconferencing equipment may influence interaction patterns.

Try to let the group know, before they begin, to what extent - and how - they're expected to actively participate. If they have some knowledge about what they're supposed to do, they are - naturally - more likely to be able to do it.

For large groups you may have to establish a set order in which people are to speak: alphabetically, by location, by seniority. If it's someone's turn and they don't wish to speak, move on and come back to them later. (This procedure achieves order, but at the expense of spontaneity). If you opt for a more informal arrangement, you will need to check that everyone participates.

It can be a good technique to monitor participation with a checklist. As people make comments, note this down. If someone isn't contributing, you can try to find out why (are they tired? do they feel like just listening? are they alright?). It may be more appropriate - in classes especially - to just ask them a question to bring them back into the conversation.

Don't make the mistake of delivering bombshell questions. Some people like to throw questions at others without warning - in teleconferencing, this isn't fair. They can't see you, can't even tell that you're probably about to ask something, so don't distress someone by demanding an instant response.

Give some warning, either that you're about to seek a response or that a particular person is going to have to answer. Surprise does not equal spontaneity.

In teleconferencing, there is no room for conversation hogs so don't indulge anyone who (deliberately or not) takes up most attention by getting in first and not 'getting out'. You will probably have a limited time in which to run the conference. If you stress this to people before you begin, and point out the need for sharing the available time, this problem may never arise.

Sometimes it will be very important that somebody talk to you, or to another presenter, at length. This can be very difficult, especially if the subject is either totally uninteresting or potentially distressing to other people in the group. One thing that can be done in this situation is to explain to the person concerned that, for the group's sake, the session must continue at this point and arrange another contact with them. You could ring them back after the session, or keep them 'on line' after it has finished. If the matter isn't pressing, an address to which they could write may suffice.

How you cope is up to the situation and your rapport with the participants. You will have to balance the needs of the individual and those of the group.

2.1.8 Feedback

Think of the problems that can arise with feedback. Will anyone be speaking at length? How will the other people in the teleconference let them know that they're going too fast/too slow? Or that they've well and truly answered a question and someone has another?

The speakers could pause every so often and ask feedback questions: 'Am I going too fast?' 'Does that answer you, or shall I go on?' 'Does everyone understand that last point?'.

Some of the responses may come in the form of grunts and groans (just as in any lecture) but that's fine - as long as the person who needed feedback understands what is meant.

You may have to structure the session so that there are points at which feedback communication can occur: a question and answer segment at the end of a talk, a checkup on line quality ten minutes into the program. If you've arranged a more informal teleconference, or the group is small (and can thus cope better with sidetracking), can be freer to ask for expansions and explanations when they need them (and a group which comments without being asked can create a positive atmosphere for the speaker).

One final comment: because sound is so important to teleconferencing, all of the participants should feel free to report any problems they're having with hearing, no matter what sort of meeting it is. Whatever their cause - whether equipment failure, line faults or mumbling speakers - you should be told of any problems with the sound. Make sure that participants know to tell you if this happens, and what to do if they can't even do that.

2.1.9 Coping with Silence

This shouldn't be a problem in a secure group. It will only seem awkward if everybody thinks that silence is a sign of failure. Silences happen in any conversation, and need not be completely avoided.

However, there are times when you really would rather have someone say something. To prevent long gaps in the conversation, make sure that the participants don't expect that someone else will do all the talking. If they know from the start that it's their meeting, too, they'll be more prepared to join in (provided you've done your homework in setting up a teleconference that everyone can be comfortable in).

Before you start, let everyone know that there's a 'thinking time' of several seconds after any questions. That way, it's clear that the silence doesn't mean that nobody is going to speak. Both the questioner and anyone who's thinking of answering will be more relaxed and more inclined to wait patiently.

You may need to reply when nobody else does, or ask the group a general question in an attempt to obtain a response. But even if a speaker's invitation to discuss something produces silence, despite all your efforts, it doesn't mean that the group has wasted the teleconference. In one country education series, the students were embarrassingly silent when a guest speaker invited discussion. Once 'off-air', however, they were quick to prove, with lively and perceptive comments, that they had gained a great deal from what they'd heard.

2.2 Running the Teleconference

2.2.1 Last Minute Check

Before you actually set up the call, run through a checklist to make sure everything's in order.

For example:

Equipment - is it in place and functioning properly?
- does everyone know how to use it?

Service - Have the lines been booked, if this needs to be done?
- do people know what to do or who to contact if something goes wrong?

The participants

- do they all know the time and place? Will they be ready?
- do they have everything they need? Did you tell them what to obtain or prepare?

The conference

- are your materials ready?
- do you know what you want to cover in the session and how you're going to present it?
- Is there an alternative program ready 'just in case'?

2.2.2 Setting Up The Teleconference

If more than one person is going to present material, or otherwise help to run the session, they should 'meet' before the participants are linked in. This allows time for them to be brought up to date on any changes and to finalize arrangements for the session. Whether the presenters are in the same place or not doesn't matter, as long as they can communicate. It might be possible to bring a leader on-line before the rest of his/her group and to use this time for discussing the organization of the session.

Some teleconferences will require the participants to be completely familiar with the agenda. Holding a brief discussion beforehand, to check the subject matter and to consider the results of any 'homework' is a good way of achieving this. Whatever mechanism is employed, it's important to ensure that by the time they're linked into the teleconference everyone is fully prepared.

As the organiser, it's your task to initiate the call. If it's to be a telephone conference call, arrange to be the first on the line. This will help to put the participants at their ease, and will prevent participants from hanging up because they have no-one to talk to.

Regardless of the group's experience with teleconferencing, they will need a brief warm-up period before the session begins. If the group is meeting for the first time, or if there's an ad hoc participant (or presenter), have everyone introduce themselves one by one. Do this in some sort of order, to help avoid confusion, and encourage them also to say something about themselves. When you begin the conference proper, people will have thus been given a brief practice, and will have some idea of voices and personalities.



Photograph 3: The Convenor-Controlled Conference Bridge Under Development at the Telecom Australia Research Laboratories

Once you and the group are settled, you can launch into the session proper. One way to begin is with a brief statement about what you want to do, or why the teleconference has been held, and what you expect the participants to do. Then you can go on with the program - or, if the meeting is consultative, you can let someone begin the discussion.

2.2.3 During The Teleconference

Having begun with an introduction or roll-call, and gone on to explain the 'ground rules' of your session, you can start on the main business of the teleconference. Remembering and retention will be highest at the beginning of the session, and will subsequently drop. It's best, therefore, to deal with the most demanding parts of the agenda first. If a talk or an intensive exchange of ideas will be part of the meeting, schedule it while everyone is still fresh. This is particularly important for teleconference leaders, because the ultimate success of the teleconference depends largely on their concentration and skills. Don't let your group bully you into extending a session interminably, because you will end up exhausted while they're still clamouring for more.

Remember to segment the teleconference as much as you can, and to keep each segment short - about fifteen to twenty minutes, especially if it's straight talking.

(i) The Good And The Bad

During the teleconference, attempt to keep to the agenda. This is sometimes a difficult task, because at the same time you've got to be flexible. It may turn out that your participants need something other than what you'd planned; and (while it's important to try to avoid this through careful planning), 'being flexible' means that you should be sympathetic to their needs. Concentrate on what they're saying - find out if there's something else which should be done.

For example, you may have planned to have a guest speaker talk on some current event. Once the call has begun, however, you might find that it's more important to the group to ask questions about how it could affect them than to simply listen to someone. You can cater for this need, without losing what you'd wanted to achieve for them, by expanding the question time or cutting down on the 'lecture'.

Sometimes it will be necessary to abandon the program you'd planned. Bad lines may force you to give up on a discussion and settle for a brief reading before terminating the call. It may turn out that the problem you were prepared to give advice on doesn't exist - that it's something else which has gone wrong. As long as the teleconference achieves what you wanted it to - solving a remote technical failure, or providing vital contact and support - it has still been a success. But if someone dominated the discussion, or turned it around to their own hobby-horse, if students gained nothing because nobody established what was needed, or if the problem was forgotten in petty bickering - then you might as well not have done it.

Sometimes you may detect constraints on the flow of information within the group. In an educational setting, for example, all comments may be directed to the group leader. Or it might happen that no-one ever comments directly on what is said, but asks you or the speaker to do so. They may just ask questions, regardless of any apparent order, or they may wait for the person on their 'left' or

'right' to speak first (this is especially likely if an image of the group has been deliberately created during the setting-up exercises - see section titled "A Sympathetic Atmospheres", below).

(ii) The Hidden Agenda

In some types of group, personalities - likes, dislikes and disagreements - will play a large part in what is said. If this is upsetting the members or disrupting the program, the leader will need to arbitrate.

The problem may be obvious (for example, a heated argument). One way of coping with this, if the adversaries can't be reconciled, is to remind them of the needs of the rest of the group and suggest that they meet privately to sort things out. Presenting the action as necessary to the survival of the group can avoid loss of face, and once the issue is no longer public it becomes easier to resolve.

Sometimes the tensions are more subtle. You may realise that people aren't behaving quite as they normally would, and that a 'hidden agenda' has crept into the proceedings.

The causes of these tensions can be difficult to ascertain. Did someone forget to ring somebody else three nights ago? Is somebody just being difficult and setting everybody else on edge? Has an unfortunate comment been taken to heart? Does someone have a problem, not necessarily to do with the present teleconference, which is affecting all of their interactions?

Sometimes the person/s responsible can be confronted, or counselled, within the session. The potential reward, if the people concerned can talk about what has happened, is a more soundly-based group. But you will have to be careful if you decide to do this. It shouldn't turn into a guilt session or a witch-hunt - and remember that the teleconference still has a goal to achieve.

As you will still need to get on with the task in hand, and as you don't want to cause further distress to the group, it might be better to make separate arrangements with the people concerned and then either continue with the program or adjourn until after you've thrashed the thing out. It depends on the sort of meeting you're holding.

(iii) A Sympathetic Atmosphere

For people to actively participate in a teleconference, they need to feel that they and their contributions are welcome. If this is to occur, a special effort must be made during the first few sessions. 'Round the table' introductions help to create a feeling of group cohesion, as participants will think of each other as being 'seated' in the order in which they were introduced.

With small groups, you could also get everybody to record the names of the others around a 'clockface'. People will then feel more confident in directing remarks to each other, and some sort of order can be achieved. In the teleconference proper, the way you and other presenters speak is important. Don't strive for perfect syntax and enunciation: it can easily be intimidating, and people may then be afraid to contribute. It's much better - while ensuring that you are

audible - to speak naturally. Warning presenters about this will also help to remind them that there are real people in the meeting, not just disembodied voices.



Photograph 4: Participants in a "Telelink" Group Conducted by the Department of Veterans' Affairs, Melbourne

It also helps if people initially give their names when contributing, and if speakers identify the intended recipient of a question (otherwise, it can sound impersonal, as though the person were speaking into a tape-recorder).

For very large groups, someone (perhaps the on-site leader) may be appointed as a mediator between the group and the distant presenter ('People are looking confused...We couldn't hear that...Someone wants to say something...').

2.2.4 Finishing Off

The session will probably be operating under external time constraints of one kind or another - and, in any case, it's not a good idea to continue teleconferencing indefinitely (an hour is ample for most purposes). If you complete your meeting before the scheduled time, use the time remaining to answer questions or to allow the participants to 'socialise'. There's little value in building a positive atmosphere during the teleconference if you then make it obvious that you've no time for the group once business

has been concluded. If you can, allow people to leave as they're ready to do so.

2.2.5 Ad Hoc Participants

Leave the first hour, the first session, the first fortnight - depending on how much time you have at your disposal - for a new group to establish itself before introducing people into the teleconference for a single session.

Give the participants information about their guest - who s/he is, what s/he does, what they'll be doing in the session. Better still, let them help decide who it will be. The ad hoc participant will need to know something about the group, too, so that s/he can prepare appropriate material, and feel easier about taking part.

When you contact the temporary participant, tell them about:

- the sessions - purpose, yourself as organiser, the particular topic of the relevant meeting
- the group - identity, requirements, expectations (and, sometimes, problems)
- teleconferencing - what it is, what it demands, what your sessions involve.

You should work out between you the details of presentation and content. Tell the ad hoc participant how to operate equipment, and about any problems that occur. (Including such apparently self-evident difficulties as faulty lines - warn them, and tell them what can be done.)

Pass on to them any particularly useful ways you've found of preparing to teleconference. Make sure that they understand about reacting to a group of individuals rather than to an anonymous audience. Give them advice on how to get feedback. Above all, try to make sure that they'll adapt to teleconferencing - rather than expecting it to adapt to them.

(For example, although a politician might be used to giving long, very detailed replies during Question Time, warn him/her that these will be lost on a high-school Politics class. Let him/her know about the implications of audio-only communication for memory and attention.)

For similar reasons - the need to adapt the message style to suit teleconferencing - an engineer who can give brilliant technical explanations only as long as s/he has the equipment at hand will have to devise a new approach.

The conference participants should be a cohesive group before the guest is introduced to them. Either the group can be 'assembled' before the speaker is brought on line, or the organiser can contact the guest before the group arrives. Both methods allow for last-minute checks and alterations, and let the organiser initiate the session only when all is ready.

Introduce the guest and the participants, and encourage the guest to use the 'clockface' method to form an image of the meeting. Hold the session in accordance with good teleconferencing technique: short segments, feedback, relaxed presentation and so on. Make interaction occur according to the method you and the guest have worked out: participants to comment spontaneously, or question in alphabetical order, or be asked to reply at random (although not without warning).

If you can, let the ad hoc participant stay in the conference until the end of the session. Provide whatever follow-up you think is appropriate. If it's been well done, the guest will have enjoyed the experience as much as you and the regular group have.

2.2.6 And Finally...

Whether you have been running a series of sessions, or have organised a single teleconference, you may sometimes need to arrange a follow-up afterwards. This will be determined by the session, the purpose, and the participants. Sometimes it will be unnecessary; sometimes a quick summary at the end of a session will be all that you need.

Follow-ups can summarise what was discussed or achieved; to expand particular areas, or clarify doubtful points. They can also be employed to direct and introduce later sessions. More rarely, a session can be evaluated - and the next one re-arranged accordingly - on the basis of information obtained from, or given to, the participants.

Follow-up for a session or series can be achieved in several ways:

- Ask everyone what they got out of a guest speaker's talk, or tell them what you think was gained.
- Send out a written summary of the proceedings.
- Initiate any decisions and let everybody involved know the results.
- Obtain any opinions about how the teleconferences could be improved.

Teleconferences should be dynamic and flexible. Always be prepared to change things as a result of experience. Alter restrictive protocols. Rework the meeting format. Reshuffle your participants at the end of a series to form better-balanced groups. The ultimate success of teleconferencing is in your hands.

3. SUMMARY

Below are the main things to keep in mind when you're organising and running a teleconference. As you gain experience, you'll find out what are the important areas for you and your participants.

3.1 Preparation

Teleconferencing is usually audio-only. This imposes limitations on attention span, alertness and memory.

To overcome this, provide visual materials and/or spoken feedback. Graphics will need to be relevant, helpful and well-organised.

Before the session starts, the organiser will need to understand the equipment and the service - including potential problems - and have a good idea of what the session will involve.

The participants will need to have some information about other people involved, and using the equipment. They should be warned about problems and told about audio-only communication.

Each session should be thoroughly planned. Know what you want to do, and how you think it could - or should - be done. Involve other presenters or leaders in deciding this.

Consult anybody else concerned. Make sure people know what can and can't be achieved. Inform people about what you want them to do - and find out what they expect from you. Check that everyone is satisfied with what's been planned.

When constructing the group, don't make it too large - or too small - to be able to do what you hope for. If you can, balance needs and personalities within it.

Determine how you want information to be presented, interaction to be arranged, and feedback to be obtained well before the session starts - but be prepared to modify your original ideas. Keep in mind what you're trying to do, who you're doing it with - or for - and how the teleconference could change this.

Know exactly what you want each session to cover. Make sure that all of the participants and the presenters (or leaders) know what preparation they must do. Try to ensure that the group still gains something of what the session was supposed to give them, even if a different structure or emphasis should emerge.

Have a 'standby' ready just in case you can't do what you'd planned. This applies whether a piece of equipment breaks down or you find you misjudged the purpose - know what else you can do.

3.2 The Session Itself

Go through a last minute checklist before initiating the call. Confirm or alter the program (sometimes with the participants, or another leader, or a guest) before the teleconference proper begins.

Allow time for introductions and/or social interaction before you start the session proper. Do what you can to help participants or guests feel comfortable.

Build a sympathetic environment in the teleconference. Speak naturally, without any forced effort to be particularly clear. Vary presentation and activities when you can. Use names. Speak to individuals, rather than to empty spaces. Encourage the other people in the teleconference to do likewise.

End the session with consideration. Don't drag it out, but don't cut it short - especially if the teleconference is an important contact for group members. If possible, everybody taking part should stay in the call until the session finishes.

The guidelines provided above can - and should - be varied in the light of your experiences so that your teleconferences will effectively meet your goals and satisfy the needs of your participants.

Procedure for working with small groups using
Telecom conference facilities available in
Australia, December, 1982. (*)

- A. Bookings are made with the 'Trunk Calls' operator.
Your group can have 8 lines connected to the
Chairperson or Leader - a total of nine lines.

N.B. A group of local call numbers can be
connected for a conference call. STD calls will
incur higher costs.

B. FORMING A 'TELELINK' GROUP

Setting up a Telelink programme is relatively
simple.

1. Select a group of six to eight people giving
attention to the individuals' needs and
interests, and if possible, establish a
balance in the group between quiet and more
vocal people. It is difficult, for example,
to work with seven shy, quiet people.
2. Assess the hearing capacity of clients by
contacting them by telephone. If a client
has a hearing difficulty, the introduction
of a volume control telephone may help.
3. Introduce the concept of Telelink groups.
Encourage group members to imagine that their
telephone is being linked in an open circle
so that members will understand that they

will be able to hear more than one person at a time.

4. Select a suitable time, day and date and contact Telecom 'Trunk Calls' to make the booking for the group.
5. Telephone proposed group members and confirm the commencement time, explaining that the operator will call and ask them to wait for the Telelink call. They may have to wait for two to four minutes, which may seem a long time, especially on the first call. If this is not carefully explained, clients often hang up and time is lost reconnecting them.
6. Give the clients a contact number in case they are unable to participate at any time.
7. Prepare programme material for the Telelink.

It is important to assist clients to accept and understand technology that facilitates the Telelink call. When this is established, the group can accommodate the occasional technical problem of sound interference or poor quality.

Normally groups run for between 45 and 60 minutes. Aim at terminating at 45 minutes to allow 15 minutes to sum up and to establish a carry-over agenda for the next Telelink if necessary.

Groups ideally run for an average of eight weeks and are then terminated. When a group terminates, each client is contacted individually for reassessment and offered further group work if appropriate. This allows the opportunity to move clients out of groups when they are no longer able to cope, for example through hearing deterioration or the onset of mental confusion which does not allow concentration for 45 minutes. This also allows re-shuffling of group members to gain a better balance of participation. As the clients are often elderly and may have a number of health problems, health breakdown and death are not uncommon. When a participant dies or must leave the group due to illness, leave the vacancy open until the end of the eight week session before introducing a new member. This allows the group sufficient time to grieve the loss of a friend.

(*) This material is reproduced from Telecare/Telelink, a 1982 Churchill Fellowship Report by J. Gibbons (mimeo) with the author's permission.